



OFFICE MEMORANDUM

DATE: December 21, 2001

TO: Region Engineers
Region Associate Delivery Engineers
Region Construction Engineers
Resident/Project Engineers/TSC Managers

FROM: Larry E. Tibbits
Chief Operations Officer

Gary D. Taylor
Chief Engineer/Deputy Director
Bureau of Highway Technical Services

SUBJECT: Bureau of Highway Instructional Memorandum 2001-20
Witnessing and Custody of Ride Quality Measurements

To assure the integrity of the final evaluation process for measurement and payment of the ride quality pay item, the following changes are to become effective immediately on all department pavement and bridge contracts.

All ride quality measurements for a pavement or bridge, when required for payment or acceptance purposes, must be witnessed by the engineer or appointed representative. Upon completion of the measurements, the engineer is to take immediate possession of the ride quality records. Attached is a check list of items to be reviewed and documented.

The engineer will evaluate the ride quality measurement records and determine eligibility for incentive and/or any corrective actions required.

All final surface grinding and ride quality measurements must be completed prior to any incentive/disincentive date stated in the contract. No "open to traffic incentive" will be paid on days prior to the final ride quality acceptance, even if the pavement or bridge has been open to traffic. Future contracts should clarify this requirement in the contract progress schedule.

If you have questions concerning these issues, please contact John LaVoy (517-322-5698), Mike Frankhouse (517-322-5672), or Tom Hynes (517-322-5711).

Chief Operations Officer

Chief Engineer/Deputy Director
Bureau of Highway Technical Services

Attachment

BOHTS:C/T:JDC:kab

Subject Index: Bituminous

cc:	C & T Division Staff	C & T Div., J. Culp	B. Jay	MCA	ACEC
	Real Estate, M. Frierson	OEO-S. El Ahmad	K. Trentham	MAA	MPA
	Design, P. Miller	J. Klee	MRBA	AUC	
	Maintenance, C. Roberts	C. Rademacher	MAPA	CRAM	
	Traffic & Safety, J. O'Doherty	V. Blaxton	MCPA	MRPA	

Control Section _____

Job # _____

Check List for Witnessing Ride Quality Measurements

For California Profilographs

(refer to Michigan Test Method 725)

The profilograph is in good mechanical condition (section 4.4.) _____

Tire pressure is per manufacturer's recommendations _____

Horizontal calibration (odometer) is within specified limits (sections 4.2 and 4.3) _____

Vertical calibration (cal. block) is within specified limits (section 4.2) _____

For each run, the profilograph starts and ends in
the correct location (see applicable specification) _____

Date, time, control section and job number are indicated on each profile _____

Contractor provided the following information for each run: starting location,
ending location, lane, and wheel path. _____

For computerized profilographs, the stationing on each run
matches the stationing of the road. _____

The following parameters match specification requirements:

	Normally Specified Value (verify in proposal)	Actual Value Used
Blanking band width	0 or 5 mm	_____
Bump height	8 mm (12.5 mm for leveling)	_____
Bump length	25 mm on trace (8 m actual)	_____

All traces and any data files have been provided to MDOT _____

Signature

Name (Printed)

Date

Control Section _____ Job # _____

Check List for Witnessing Ride Quality Measurements

For Lightweight Profilometers (refer to Michigan Test Method 726)

The profilometer is in good mechanical condition (laser securely mounted, computer securely mounted, laser beam is not obstructed) _____

Tire pressure is per manufacturer's recommendations _____

System operation verified by a bounce test _____

Horizontal calibration(odometer) is within specified limits (sections 4.3) _____

Vertical calibration is within specified limits (section 4.4) _____

For each run, the profilometer starts and ends in the correct location (see applicable specification) _____

Date, time, control section and job number are indicated on each profile _____

Contractor provided information for each run: starting location, ending location, lane and wheel path. _____

The stationing of each run matches the stationing of the road _____

Bump and dip detection activated _____

The following parameters match specification requirements:

	Normally Specified Value (verify in proposal)	Actual Value Used
Blanking band width	0 or 5 mm	_____
Bump height	8 mm (12.5 mm on leveling)	_____
Bump length	25 mm on trace (8 m actual)	_____
Scallop rounding	1 mm	_____
Low pass filter	0.61 m	_____
High pass filter	95.8 m	_____

All traces and data files have been provided to MDOT _____

Signature

Name (Printed)

Date